Response to OA dated: September 23, 2004

Response dated: January 6, 2005

In the Claims:

Please amend claims 1, 3, 5, 6, 13,15 and 25; and add claims 26-27, all as shown below.

Applicant reserves the right to prosecute any originally presented or canceled claims in a continuing

or future application.

1. (Currently Amended) A system for code generation from a software application design

product source data, comprising:

a data navigation layer for interfaces that interfaces with, and for providing provides

navigational access to, a software application design product source data, wherein said data

navigation layer provides navigation inside the source data via a combination of pointers to the

source data;

a template for specifying <u>that specifies instructions to drive</u> a code generation process to be

that is applied to said source data;

a parser for parsing that parses said template in accordance with [[any]] specified rules, filter

filters, and conditions, and notifiers, and accesses the source data via the pointers of the data

navigation layer, to generate code, wherein said specified rules implement the template instructions,

and wherein said filters are used to transform data; and,

a code output mechanism for the output that outputs said generated code.

2. (Original) The system of claim 1 wherein said code output mechanism outputs said

generated code to a storage device.

3. (Currently Amended) The system of claim 1 further comprising:

rules that implement template instructions and dynamically generate output when static

template code is not appropriate.

4. (Original) The system of claim [[3]] 1 further comprising:

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notifiers that include logic applied when a rule is invoked, to allow external components to be notified of the progress of the code generation process.

(Currently Amended) The system of claim [[3]] 1 further comprising:
 condition specifiers that include logic applied when a rule is invoked, to evaluate conditions
 and allow code generation depending on specific conditions.

6. (Currently Amended) The system of claim [[3]] 1 further comprising: filters that include logic applied when a rule rules is invoked, to transform data.

7. (Original) The system of claim 1 wherein said system further includes: internal rules that provide basic functions to query symbol values from the data source, navigate through the data source, and open and close files.

8. (Original) The system of claim 1 wherein said system further includes: internal filters that provide generic transformation capabilities, such as lowercase/uppercase conversion.

- 9. (Original) The system of claim 1 wherein said navigation layer allows mapping of an abstracted data representation to said source data.
- 10. (Original) The system of claim 9 wherein said parser provides functions to manipulate a scope stack, wherein said scope stack addresses said abstracted data representation.
- 11. (Original) The system of claim 10 wherein said parser creates a hierarchical scope stack.
- 12. (Original) The system of claim 10 wherein navigation within said scope stack is by a pointer.

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13. (Currently Amended) A method of generating computer code, comprising the steps of:

providing a data navigation layer [[for]] to interface with, and for providing to provide navigational access to, a software application design product source data, wherein said data navigation layer provides navigation inside the source data via a combination of pointers to the source data;

providing a template for specifying to specify instructions to drive a code generation process to be that is applied to said source data;

parsing said template <u>using a parser</u> in accordance with any specified rules, filter <u>filters</u>, <u>and</u> conditions, and notifies, <u>and accessing the source data via the pointers of the data navigation layer</u>, to generate code, <u>wherein said specified rules implement the template instructions</u>, and <u>wherein said filters are used to transform data</u>; and,

outputting, via a code output mechanism, said generated code.

- 14. (Original) The method of claim 13 wherein said step of outputting includes outputting said generated code to a storage device.
- 15. (Currently Amended) The method of claim 13 further comprising:

 parsing rules that implement template instructions and dynamically generate output when static template code is not appropriate.
- 16. (Original) The method of claim 15 further comprising: parsing notifies that include logic applied when a rule is invoked, to allow external components to be notified of the progress of the code generation process.
- 17. (Original) The method of claim 15 further comprising: parsing condition specifiers that include logic applied when a rule is invoked, to evaluate conditions and allow code generation depending on specific conditions.

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18. (Original) The method of claim 15 further comprising:

parsing filters that include logic applied when a rules is invoked, to transform data.

19. (Original) The method of claim 13 further comprising the step of:

parsing internal rules that provide basic functions to query symbol values from the data

source, navigate through the data source, and open and close files.

20. (Original) The method of claim 13 further comprising the step of:

parsing internal filters that provide generic transformation capabilities, such as

lowercase/uppercase conversion.

21. (Original) The method of claim 13 wherein said navigation layer maps an abstracted data

representation to said source data.

22. (Original) The method of claim 21 wherein said parser provides functions to manipulate a

scope stack, wherein said scope stack addresses said abstracted data representation.

23. (Original) The method of claim 22 wherein said parser creates a hierarchical scope stack.

24. (Original) The method of claim 22 further comprising the step of:

navigating within said scope stack using a pointer.

25. (Currently Amended) A system for code generation, comprising:

a data navigation layer [[for]] to interface with, and for providing navigational access to, a

software application design product source data, said navigation layer allows mapping of an

abstracted data representation to said source data;

a template for specifying to specify instructions to drive a code generation process to be that

is applied to said source data;

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a parser for parsing to parse said template in accordance with any specified rules, filter filters, conditions, and notifiers, and accessing the source data via the data navigation layer, to generate code, said parser provides functions to manipulate a scope stack, wherein said scope stack addresses said abstracted data representation, said parser creates a hierarchical scope stack, navigation within said scope stack is by a pointer;

rules that implement template instructions and dynamically generate output when static template code is not appropriate;

notifiers that include logic applied when a rule is invoked, to allow external components to be notified of the progress of the code generation process;

condition specifiers that include logic applied when a rule is invoked, to evaluate conditions and allow code generation depending on specific conditions; and,

filters that include logic applied when a [[rules]] rule is invoked, to transform data.

- 26. (New) A system according to claim 1, wherein said rules, filters and conditions are registered as plug-ins to said parser.
- 27. (New) A method according to claim 13, wherein said rules, filters and conditions are registered as plug-ins to said parser.

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